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**GUN-SHOT WOUNDS OF THE THORAX. IS THE TREATMENT BY
HERMETICALLY SEALING THEM JUSTIFIABLE?**

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—Medical writings are full of exploded theories. It seems to be thought necessary, to complete the history of any subject, that those who treat of it should tell not only what is known to be true, but also what has at any time been thought to be so by ingenious theorists. This is much to be regretted, since, although a disclaimer may be finally made, the very statement of the fallacy makes a certain impression and influences practice. I am led to make these remarks by observing very recently in the Essay on Gun-shot Wounds by Dr. Becker, published in your JOURNAL, and also in the Military Surgery of Prof. F. H. Hamilton, elaborate statements of the plan of hermetically sealing gun-shot wounds of the thorax. In both cases the writers express, finally, their doubts of the wisdom of such practice. And well they may if they have ever seen its effects! Yet many students may get the impression that this is one of the approved methods of treatment.

In July, 1864, it came in my way to see six cases at one time treated in this manner at the field hospital of the 18th army corps, before Petersburg. All six promptly perished.

The verdict of Army surgeons who have tried this method I think is unanimous. Can we not then be done with it—banish it from our books of military surgery, and let it rest with the multitude of exploded theories which have preceded it?

A writer in the London *Lancet*, some time ago, clearly showed that it was unphilosophical. Experience has proved it fatal.

I have had under my charge, during the past three years, a good many recent gun-shot wounds of the thorax, all of which were treated with simple dressings and perfect rest, and I believe at least one third of the whole number made good recoveries. I cannot help thinking that frequently wounds classed as those of the thorax have

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also penetrated the diaphragm, and death has resulted from peritonitis. Allowance may not always be made for the convexity of the diaphragm, and in the multitude of cases calling for the surgeon's attention in hospitals in the field, but little time is given to autopsies.

Truly yours,

GEORGE DERBY,

Surgeon U.S.V., in charge Cony Gen. Hospital.

"Cony" U. S. Gen. Hospital, Augusta, Me., March 12, 1865.

PATHOLOGY AND THERAPEUTICS OF ACUTE CATARRH OF THE BLADDER.

BY HERMAN ZEISSEL, PROFESSOR AT THE UNIVERSITY OF VIENNA.

[Translated for the Boston Medical and Surgical Journal, from a pamphlet issued in 1863.]

THE bladder is, owing to its position as an intermediate organ between the ureters and the urethra on the one side, and by its connection with the prostate on the other, subjected, outside of its idiopathic affections, to numerous diseases transmitted from neighboring organs.

There is also a difference to be recognized between the catarrhal affections of the bladder, as idiopathic and as arising from transmission. As to what relates to extension or transmission of the catarrhal affection of the bladder, we learn by experience that catarrh of the bladder arises in most cases through participation with the catarrhal affection of the urethra, and less frequently from affections of the other pelvic organs.

We desire in this article to confine ourselves principally to that catarrhal affection of the bladder which is dependent upon a similar affection of the urethra. Clinical experience teaches that gonorrhœa leads frequently to disease of the bladder. Generally, the bladder becomes affected in consequence of gonorrhœa when this disease has attacked the posterior portion of the canal or affected the prostate. Such are the well-known cases usually designated as chronic or secondary gleet. As it is generally only after weeks duration of gonorrhœa that the portion of the urethra nearest the bladder becomes affected, so a similar interval occurs before the bladder becomes diseased. There are cases, however, where only a few days after the commencement of the gonorrhœa a catarrhal affection of the bladder is established. Before we begin a more precise description of the semiotics of this disease of the bladder, it is necessary to observe that the disease does not affect the entire surface of the bladder, but only the so-called neck. The indications that only this portion of the bladder is sympathetically affected, are given by a remarkable functional disturbance of the organ. Micturition becomes extremely painful, and is often so distressing that, under the violent tenesmus, the patient is obliged frequently to micturate every ten minutes. If he yields to this desire, he generally passes only a

few drops of a very acid urine. Should every single drop cause pain as it leaves the bladder, the last will be of such a violent kind that, as the patient expresses himself, it seems as if the penis became spasmodically drawn back against the os pubis, so as to be in a half erect condition.

The passing of the few drops of urine proceeds so slowly that patients sometimes involuntarily pass the urine in bed. Should this complaint be not properly recognized, the patient becomes subject to disturbance of the digestive organs, accompanied by fever and other severe symptoms, which cause great alarm to him and to the inexperienced physician. Up to this time the small quantity of urine passed continues clear, and only after long standing shows a sediment of epithelium and mucus; but at a later period it shows a small quantity of blood, usually forced, after the urine has passed, in a few drops from the bladder. This hæmaturia is caused by the protecting epithelium becoming separated from the inflamed mucous coat of the neck of the bladder, so that the capillaries are laid bare and subjected to forced straining of the neck, by which bleeding is produced. If, under this condition, we examine more carefully, we find that the abundant muco-purulent secretion which was first formed has considerably diminished, and has yielded to a more serous discharge. It produces at the mouth of the urethra, when the patient has been able for some time to resist the desire to urinate, a sticky serous secretion, similar to that observed in a violent catarrhal affection of the mucous membrane of the nose. If we examine the body of the bladder above the os pubis, it presents no sensitiveness to pressure even with considerable force; a digital examination per rectum, although no enlarged prostate can be felt, will produce intolerable suffering by pressure upon the sensitive portion of the urethra. From such an examination one has the right to conclude that the entire surface of the bladder is not affected, but only the forward part—that is, the neck.

As we have already remarked, clear urine, or at most presenting but a few drops of blood, will always be passed during the catarrhal affection of the neck of the bladder, in spite of the violent tenesmus. It therefore happens, as the disease advances over the entire mucous coat of the bladder, that before the first drop of urine passes blood has already preceded it. It is natural, therefore, that the urine which passes afterwards should be no longer clear, but turbid by means of this bloody muco-purulent secretion. As is well known, the mucous secretion of the bladder causes fermentation in the urine; carbonate of ammonia, therefore, becomes developed in the bladder, and in such cases will give the urine an alkaline re-action. At this stage of the catarrh, so far as intensity is concerned, an increase of the disease is possible. Although the urine, after cooling, precipitates up to this time only a muco-purulent sediment, this will, by the further progress and continued separation of the mucous lining, reach such

a state as to fill the urine with lumps of pus, mucus and blood. The muco-purulent deposit in the urine during the extreme stage of the disease, presents a flocculent or jelly-like condition—an appearance which is produced by the carbonate of ammonia formed in the urine, with the pus and mucous secretions. If we pour ammonia over pus and mucus, we produce a similar stringy, jelly-like substance. While the urine in the earlier stages produces an alkaline re-action, it will, after standing some time, give off a disagreeable, ammoniacal odor. It gives off, in those cases where the affection of the bladder has reached the last-mentioned stage, even when just passed, such an ammoniacal smell that one is justified in supposing that it is undergoing a foul fermentation in the bladder. This last condition, usually denominated blennorrhœa of the bladder, is a less frequent result of blennorrhœa of the urethra, but is more commonly attendant upon a violent stricture of the urethra which has had its origin in a blennorrhœa of that canal. While the two earlier stages of this affection of the bladder depend only upon a transmitted pathological change in the mucous membrane of the bladder, the blennorrhœa produces such an hypertrophy of the muscular coat that the single bundles of fibres have the appearance of the columnæ carneæ of the heart—a condition called by the French "*la vessie à colonne*." So long as the neck of the bladder is alone affected, so long is the anatomical change of the mucous parts scarcely to be perceived; but when the affection extends to the entire mucous membrane of the bladder, an anatomical change occurs in the mucous and muscular coats which can never be entirely removed, and which leads to a permanent functional disturbance of this organ. We therefore may consider the catarrhal affection of the neck of the bladder as an acute catarrh of the bladder; while in the affection of the entire thickness, the muscles become involved and the disease takes on a chronic character. The ordinary duration of the catarrh of the bladder contracted from a blennorrhœa of the urethra is, under proper care, from eight to twelve days; but may, however, under certain conditions, continue much longer, if by some accident or injurious influence a renewal of the inflammation takes place. This may be caused by hæmorrhoids, from the proximity of the branches of veins and the venous network which surrounds the bladder and rectum. And as it may be caused by hæmorrhoids, so may it arise from a passive hyperæmia of the bladder.

Causes of the Acute Catarrh of the Bladder.—As already mentioned, the acute catarrh of the bladder arises from an extension of a blennorrhœa of the urethra to the bladder. There are, however, influences which are more less favorable to the further extension of the disease. Such are the drinking of new, unfermented beer, must, or champagne wine. The too frequent drinking of soda-water, which has of late years become so fashionable, is also injurious. Experience has taught us that the use of fermenting drinks has an injurious

effect upon the neck of the bladder of even healthy persons. There are well-known cases of numerous individuals who, after drinking a badly fermented beer, have been seized with dysuria, at times amounting to ischuria. Some hours after partaking such drinks, these individuals have the continual desire to pass urine, which, coming away only by drops, shows, after cooling, a mucous precipitate. Often in those districts where, during the autumn, the apple must is drunk in the greatest quantity, the larger part of the younger male portion of the villagers become affected in this manner. With us here in Austria, where great quantities of apple must and apple wine are likewise drunk, it has commonly been known as the cider disease. Next to the above-mentioned drinks, there are certain medicinal injections which I believe may develop an acute catarrh of the bladder; as, for example, the use of *terra catechu* or *sanguis draconis* in the acute stages of the blennorrhœa of the urethra. Some well-skilled medical authors claim to have seen a similar injurious influence from injections of *copaiba* and *cubebs*. I cannot conceive myself, as yet, of such a thing, although I remember seeing in one case an inflammatory condition of the neck of the bladder coming on after an injection of balsam of *copaiba*. I can, however, conceive that by an unskilful injection, with only a half-filled syringe, by which air may be forced into the bladder, *tenesmus* may be produced which may cause all the symptoms of an acute catarrh of the bladder.

Very frequently an acute catarrh of the bladder is produced by the passing of catheters and bougies. It has long been known that the neck of the bladder, and likewise the *verumontanum* or *colliculus seminalis*, is the most sensitive part of the urinary apparatus. And it happens not unfrequently that the strongest man faints from an intense pain caused by the passing of the instrument over the *caput gallinaginis*. If the surrounding parts are besides already inflamed, as by an extended blennorrhœa of the urethra, it is extremely easy to make the catarrhal affection worse by an instrumental excitant. Coitus during gonorrhœa will frequently be punished by an acute catarrh of the bladder. A forced ride will likewise produce it, by injury to the prostate.

Prognosis of Acute Catarrh of the Bladder.—Acute catarrh of the bladder will, with proper care, when it arises from gonorrhœa, be cured; disappearing with the last sign of the gleet. Not unfrequently does the catarrh extend to the seminal canal, producing a catarrh, or an epididymitis. If the acute condition returns frequently, it is apt to produce locally a permanent change; not unfrequently a permanent growth of the point of the *trigonum lieutaudi*, or *la luetle vesicale* of Amussat, which may prevent the passing of the secretions. More frequently than this, according to my knowledge, is a diseased condition very seldom spoken of by authors, namely, a permanent hyperæmia of the *colliculus seminalis*, which is noticed during the life of the patient at the moment of ejaculation during sexual excitement, by

an intense pain, as if a heated needle were passed through the perinæum. In other cases the catarrhal process extends merely to the vesiculæ seminales, causing such a relaxation of them that the accumulated semen becomes forced out, by the slightest pressure by the contents of the rectum, through the urethra (spermatorrhœa). The catarrhal process extends itself at times to the outlet of the prostate, so that several of them will continually throw off its peculiar secretion mixed with mucus, which will be passed by the urine in the form of a stringy secretion. Although as a rule, as has already been said, the acute catarrh passes off without any particular injury, it may, at times, produce extremely unpleasant consequences.

Therapeutics.—In the treatment of acute vesical catarrh, rest and a proper diet are of paramount importance. The patient should remain in his room, even if he is not obliged to keep his bed. An equable temperature is necessary, that a part of the aqueous secretion may pass off by the skin that otherwise would have to pass by the urethra. The diet must be regulated according to the degree of fever. Should there be considerable fever, the patient should be restricted to a soup diet. For drink, the patient should take decoctum seminum lini or an emulsion of canabina, with or without syrup diacodii. We cannot say, however, whether any of these oleaginous or mucilaginous substances pass into the urine or not. Their influence may be merely to make the urine more watery. The principal object in the treatment is, to relieve the patient from the incessant desire to micturate; this is more properly effected by the administering of an anodyne, either inwardly or topically; and for this purpose we cannot do better than to use opium or morphia—constipation being carefully guarded against, as every passage of feces by an inflamed prostate is to the patient extremely painful. In order to dilute the urine of the patient, and to introduce a narcotic into the system, we have succeeded for years by the use of herba herniariæ glabræ, a plant which without any good reason has become almost entirely obsolete. This plant belongs to the papilionaceæ, and grows wild with us. It is a mild diuretic, and contains a narcotic principle, which I can bear witness has almost a specific influence upon the sphincter muscles, without paralyzing or obstructing their action. A similar, although weaker drug is the chenopodium ambrosoides; and I prescribe for such affections the following:—
R. Herniariæ glabræ, chenopodii ambrosidis, aa. dr. tres. Div. in doses æq. No. viij. One of these portions should be infused in a saucerful of boiling water, to which milk and sugar may be added.

When it is possible, we poultice the perinæum and those parts in the neighborhood of the bladder. After a moderate quantity of the tea has been taken, the urination becomes remarkably easier. By way of a parenthesis, we would remark that we cannot recommend this plant too highly in chronic catarrh also. We can, as we have said already, assist the action of the herniaria by topical narcotics; for

which purpose we may apply a cataplasm of cicuta, and in urgent cases a suppository of the extract of belladonna as follows:—R. Ext. belladonnæ, gr. i.; butyr. simpl. et butyr. de cacao, aa 3 ss. M. Ft. suppositoria, No. iv. One of these is to be carefully passed up the rectum morning and evening. If there should be constipation for several days, I generally give a clyster of ol. ricini. If at times painful excretions take place, we must try to obviate them by lukewarm cataplasms of conium. Should retention of urine occur, we must try to overcome it, if possible, without long delay, by introducing a conical moderate-sized elastic catheter with a bulb upon its end. The catheter should be well oiled before passing, and should be allowed to remain in the bladder for half an hour. The so called *bougies à demeure* are very seldom borne by the patient in this case. Before I close, I feel it my duty to call attention to what has almost become a traditional misconception of the treatment of this disease in medicine. In most text books, chronic catarrh of the bladder is in most cases treated after one rule; namely, by the use of potassa or kali carb. either in the form of a solution or soda water. My experience teaches me to speak decidedly against this custom. I have shown that similar diseased conditions are frequently produced by the partaking of beer, must, &c. The explanation of their action may be found in the laws of Wöhler, as where alkaline salts or acetate of potash are introduced into the blood, they become transformed into a carbonic oxyde, which I believe to be the injurious element in the above-mentioned drinks, and which would be increased by the addition of these carbonates; as I have seen a decided tendency to grow worse with such patients in my practice where carbonic acid drinks were administered. Equally unprofitable is the use of the decoction fol. uvæ-ursi and all other astringent medicines in the acute catarrh of the bladder. All such medicines containing carbonic acids, and the mineral waters of Preblau, Gieshübel, Franz-bad, Güsteine, Karlsbad, &c., are to be kept from such patients as are affected with chronic catarrh of the bladder.

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FATAL CASE OF DIPHTHERIA BY INOCULATION.

[Communicated for the Boston Medical and Surgical Journal.]

In the latter part of last summer, I was called to Washington Centre, six miles distant, to visit W. B. S——, æt. 30, lawyer by profession—and from him learned the following facts:—His sister had recently died of a very malignant type of diphtheria, in the neighboring town of Stoddard. She was sick but a few days, and during this time Mr. S. assisted in taking care of her. A few hours before her death, she vomited, and a portion of the matter ejected from her stomach came in contact with an abraded surface upon one of his fingers. This occurred on the 25th of August, I think. No notice

was taken of it at the time, neither did it occasion any alarm until the second night afterwards, when he was awakened from his sleep by excessive pain in the part. On the 29th I was called to visit him, and found him laboring under the following symptoms:—pulse 110; skin hot and dry; tongue covered with thin white coating; hand, and especially the finger that received the poison, very painful and excessively swollen; some tenderness of arm, with reddish lines following the course of the veins. His throat was not particularly involved at this time. In brief, he had evidently contracted diphtheria by *inoculation*. On my next visit, the following day, the characteristic exudation had appeared upon the tonsils and adjacent structures, as I had predicted to the friends would very soon occur. The treatment consisted essentially of stimulants and tonics, varied as circumstances seemed to demand, emollient poultices to hand, with caustic and various gargles to throat, &c. But in spite of all our efforts, he—though previously a stout, healthy person, rapidly sank, and died about the twelfth day after receiving the infection—previous to which his throat became cleared of all exudation. He was entirely overcome by the intensity of the poison, and death took place purely from exhaustion.

I have thus briefly sketched a few of the outlines of this case, from memory, more especially to show the manner in which the disease was contracted. Greenhow, in his work on diphtheria, makes no mention of this manner of propagating the disease, neither do Dr. James Wynne nor Prof. Chapman in their papers on diphtheria, and not having read any account which mentions it, I have thought this case worthy of a brief record. It gives to my mind conclusive evidence that diphtheria can be contracted by inoculation, which fact it is important to know in addition to its other terrible features, when occurring in an epidemic form. S. M. DINSMOOR, M.D.

E. Washington, N. H., Feb. 22, 1865.

ON THE USE OF ARSENIC.

BY DR. CUMMINS, PRESIDENT OF THE MEDICAL AND SURGICAL SOCIETY OF CORK.

THERE are few medicines the strikingly beneficial effects of which are more obvious than those of arsenic.

An inveterate skin disease, which had, perhaps, for years tormented its victim, placing him almost as far beyond the pale of society as did the leprosy of old, fades away imperceptibly under its use, and enables the quondam sufferer to pay grateful homage to the healing art; or the worn-out subject of neuralgia, habituated to sleepless nights, and tortured restlessness, casts off the chain that had bound him to suffering, and thankfully acknowledges that to arsenic he is indebted for repose and comfort. Or some intractable intermittent, which quinine had failed to remove, is speedily banished from the system

by the same means; or the spasmodic contortions, which render the victim of chorea a caricature of humanity, acknowledge the power of this remarkable therapeutic agent, which restores the free and voluntary play of nerve and muscle. Nay more—in these, and many other diseases, not only is the local malady removed, but the tonic power of the medicine is felt in every part of the system. Would that we could say—all these triumphs of our art are achieved without danger!

Arsenic, as a medicine, is generally used in small and frequently repeated doses, continued often for a very considerable period. We are told by some authorities that it is not cumulative; and as this opinion was gravely maintained by a practitioner of considerable experience at a coroner's inquest, to which I shall presently allude, I think it well to occupy a little of the Society's time with the discussion of a question of such *vital importance* to all who undertake to administer arsenic in disease.

Dr. MacSwiney stated, before the Surgical Society of Ireland (see *Dublin Medical Press*, May 6th, 1863) that in a celebrated trial, which took place in France, there was a great discrepancy of opinion as to whether arsenic is cumulative or not—Danger, Flandin, Orfila, and other eminent toxicologists, maintaining that it is. But, instead of occupying your time with authorities on the subject, I shall discuss it on its own merits. And first—what do we mean by the cumulative action of medicines? Dr. Fleming, in the following passage (*Edinburgh Medical Journal*) states it to be “the gradual increase of physiological action from the successive exhibition of equal doses. When a second dose is given, before the effects of the first have passed away, we add to what remains of the action of the first the full operation of the second, and so on with the third and subsequent doses, until finally the sum of effects exceeds the limits of medicinal, and passes into those of poisonous action.” Now I believe all authorities admit that when arsenic is continued in small doses for a time, it may be weeks or months, certain physiological effects are produced; and, according to Dr. Fleming's definition of cumulative action, this admitted fact ought sufficiently to establish its cumulative power; for if the first dose does not produce the specific effects, and subsequent ones do, it follows that one dose must overtake the other within the system; and further, if physiological effects can be thus produced, it is only a question of time as to whether toxic effects may not follow.

However freely a medicine is eliminated from the system, a certain time is necessary for its elimination; and if, previous to that given time, a second dose is exhibited, there must be cumulation. Well-known facts also prove that free elimination does not prevent cumulation. For instance, few medicines run off more freely by skin, stomach and bowels than tartar-emetic, and yet the system learns soon to tolerate its presence, and allow large quantities to

remain within it—witness the late cases of criminal poisoning with that substance—so we may, I think, admit that the freedom with which arsenic is eliminated is no proof that it cannot accumulate.

The fact which stands out most prominently in opposition to the hypothesis that arsenic is cumulative is the alleged habitual indulgence in its use, even in daily quantities of from two to four grains, by the natives of Bohemia, Silesia, and some parts of the Austrian Empire, who, it is said, take it to invigorate the system, to improve the power of the respiratory organs, and to increase their powers of endurance (see *Dublin Medical Press—ante cit.*); but while we admit that these effects may be produced by it, and may be sufficiently appreciable to induce the ignorant to continue its use, just as the stimulating effects of alcohol lure on many a victim to destruction; yet, in the absence of the fullest information, this cannot be used as an argument against what reasoning would lead us to expect, and what well-ascertained and well-authenticated facts establish.

The facts I have yet to mention are some of them quoted from various sources, some are my own. They demonstrate two things—1st, that arsenic is a slow poison; and 2d, that it is a cumulative one; the difference between a slow and a cumulative poison being, that one, when given in continued small doses, produces effects different from the ordinary poisonous action of the agent; while the other, when similarly administered, suddenly causes the symptoms of a full dose at some uncertain interval of time.

In the *Dublin Medical Press* (May 6th, 1863) we find a most interesting case, recorded by Dr. John Barry, among the *Surgical Society's Transactions*, of a lady who, during a course of arsenic, under the observation of a London practitioner of great experience in the use of this medicine, was suddenly attacked with paralysis of both hands and feet. Ten years of protracted suffering and broken health followed, and then small black masses appeared imbedded in the skin, around an ulcer on the leg; these, on being analyzed, were found to consist of arsenic, and the hitherto ineffectual struggle of her constitution with the poison thus ended in the triumph of the former.

Several gentlemen took part in the discussion which followed the reading of this case; and Dr. Macnamara related a case in which arsenic, having hardly affected the eyelids or fauces, produced such intense diarrhoea that death was only warded off by powerful stimulants. Dr. H. Kennedy also related a case where a single application of arsenic produced a very severe form of paralysis of both hands and feet.

Dr. Hastings, of Worcester (*Provincial Medical Journal*, August, 1848), relates the history of a patient who, after taking from three to five drops of Fowler's solution, thrice a-day for some weeks, suffered from great weakness, and partial paralysis of both upper and lower extremities, with burning pains in feet, &c. Dr. Turnstile, of Bath, followed it up by the case of a young woman who took three

minims of liquor arsenicalis for seven days, and became thoroughly prostrate, with peculiar glassiness of the conjunctiva; and another where the same medicine, taken by a young man, produced lassitude and incapacity for active exertion, reproduced by any slight cold. Dr. Erichsen (*Medical Gazette*, May, 1843) mentions the case of a young lady, of highly nervous temperament, but otherwise perfectly healthy, and without hereditary predisposition, who took Fowler's solution, and, as a consequence, suffered from extensive derangement of the stomach, followed by a violent neuralgic attack, and, at a subsequent period, a distressing train of hysterical symptoms, which terminated in a state of what might be called hopeless dementia.

Dr. Burne has reported the case of a young lady who took, in divided doses, in three days, one fifth of a grain of arsenic; symptoms of inflammation of the stomach, and alarming symptoms of a nervous character appeared (*Taylor's Medical Jurisprudence*).

Last spring I was, myself, consulted by a gentleman who gave the following history of his case:—He had suffered for a long time from a scaly eruption of his ear, and had in vain used various applications, and taken much medicine—when a book, written by a London surgeon, strongly recommending the use of arsenic in skin disease, fell in his way. Its perusal so interested him that he corresponded with the author, and was ordered arsenic. This he continued, in doses of from three to six drops of Fowler's solution, three times a-day for two months, when the disease rapidly yielded to the treatment; and as there was tingling itching, and partial desquamation of the hands and feet, the dose was reduced, and continued thus for another month, when I was sent for in consequence of great irritation of the lower extremities, and symptoms of inflammation of the stomach having set in; and it was only by great care and active treatment that he was restored to comparative health. I met him this day (April 13th), and he assured me that he has never since felt as well, or as equal to active exertion as before. These, and other cases that might be brought forward, prove that arsenic is a slow poison; that, like lead, mercury, silver, alcohol, &c., it remains long in the system, differing altogether from such poisons as tobacco and opium, which, when continued for a long time, produce injurious effects, due rather to a chronic influence upon the nutrition of the body, than to gradual accumulation within it. The following case is somewhat different from those I have related, as, instead of producing a slow poisoning, arsenic, in divided doses, continued for months, without, as far as we are aware, any but beneficial effects, suddenly, and without any known cause, exhibited the appalling train of symptoms which characterize the full toxic effects of the mineral; it is a case paralleled only by the action of strychnia, digitaline, and such deadly alkaloids, which, whether from insolubility, impaired digestion, or through accumulation, after being taken for some time with impunity, occasionally terminate life in a few hours.

At 4, A.M., on the morning of the first of April, I was called to see a man, aged 40, suffering from vomiting and diarrhoea. His friends informed me that he had been in good health the previous day, had taken nothing to disagree with him, and had returned home at the usual hour to supper, but felt disinclined to partake of it. At 7, P.M., vomiting commenced, and shortly after diarrhoea, both continuing up to the time of my visit. He was then lying on his back, extremely prostrate, cold, pulseless, and thirsty; he had taken punch and brandy, which had failed to stimulate him; he was perfectly conscious, and answered my questions in a distinct and natural voice; the pupils were dilated; the surface of the body was cold and dark colored; hands blue and corrugated; countenance pinched and anxious; there was great tenderness of epigastrium and abdomen generally; tongue was white; the breath was not cold, and there were no cramps. Vomiting and diarrhoea did not recur during my visit, and all the discharges had been thrown out.

I prescribed medicinal and alcoholic stimulants freely, and opium cautiously. External warmth was applied, and such other ordinary treatment as seemed indicated. I saw him again at 10, A.M. He was then in much the same state as before, except that the body and extremities had regained their warmth, and that the respiration was short and hurried.

Diarrhoea and vomiting had returned during my absence, and the discharges had been kept for me; those from the stomach were of a reddish brown, and the stools consisted of a reddish serum. He died shortly after.

I was not aware that this poor man had been taking medicine of any kind, as it had not been mentioned to me. However I thought the case suspicious, as although death might have been caused by perforation of some internal viscus, or by cholera, there was a sufficient amount of dissimilarity from the symptoms and course of such affections, as well as so close a resemblance to those of irritant poisoning, as to make an inquest necessary. It was not until afterwards that I ascertained the true history of the case, which was as follows: The patient had long suffered from an intractable skin disease, affecting one of his legs; and his master, a non-practising physician, who had read Mr. Hunt's book, and become deeply imbued with his views as to the value of arsenic, had, with the concurrence of another medical gentleman, ordered him about three minims of Fowler's solution, three times a-day, cautioning him immediately to report any affection of the conjunctiva, or other physiological effect of arsenic.

The poor man derived such benefit locally and generally from the medicine that he became deeply enamored of it, continuing to take it steadily for about ten or twelve months. We all know the recklessness and hardihood of the Irish character, and can easily believe that slight discomfort about the eye, throat and face, such as arsenic produces, might have easily existed unnoticed, or uncomplained of,

and thus the medicine been permitted to accumulate until the symptoms of poisoning, by a large dose, were suddenly manifested.* I have no doubt whatever that the patient was thus poisoned; and I gave evidence to that effect at the inquest. Unfortunately, however, there was no *post-mortem* examination of the body to bear me out; as the jurors, who were principally uneducated laboring men, stood in awe of ordering their friend "to be cut up in pieces like a felon, and sent to a chemist to be analyzed," as a medical gentleman, who was present, told them would have to be done if there was an examination. I was the only material witness; and I testified as above, that, in my opinion, deceased died from arsenical poisoning. Nevertheless seven of the jurors gave a verdict in direct opposition to the evidence. So much for inquests! The verdict, however, would probably have been different had the case been a criminal one; but under the circumstances there was no great need for close investigation. The lesson it teaches, however, is too valuable to be thrown away.

I have read Mr. Hunt's book, as well as several of his papers, which, from time to time, have appeared in the medical journals, and I think his mode of exhibiting arsenic most judicious, and far less dangerous than the old method of prescribing gradually increasing doses. It is the one I always adopt myself, and I have never seen disagreeable effects follow. During a course of arsenic the patient should be frequently seen and closely examined. The peculiar silvery whiteness of the tongue, described by Dr. Begbie (*Ed. Med. Journal*) is exceedingly characteristic of the first constitutional influence of the medicine, and is seldom absent; it is soon followed by swelling of the face, redness and itching of the conjunctiva and eyelids, dryness of the fauces, and occasionally by the horizontal red line within the lower lid, described by Mr. Hunt. The moment any one of these symptoms is recognized the dose of arsenic must be reduced, and *under no circumstances* should it be continued for many consecutive months, as it would seem from the cases I have mentioned, and others, that after a time the excretory organs become habituated to its presence, and are insusceptible of the amount of irritation which the constant excretion of an abnormal product demands. In this particular arsenic seems allied, in its physiological action, to nitrate of silver, which, we know, will never accumulate under the skin in sufficient quantity to discolor it, if its administration is suspended from time to time.

With all the precautions I have mentioned, however, the use of arsenic is occasionally attended with some risk; for not only is it, at times, liable to exacerbations, remissions, and intermissions in its action (Dr. A. Thompson), but certain constitutions will not tolerate the smallest dose with impunity. Such idiosyncracies, of course, are

* Since the above was written, I have heard from the man's master that none of the physiological effects of arsenic could have occurred, as he examined him constantly.

very exceptional, and might be urged with equal justice against mercury, which, in almost infinitesimal quantity, sometimes salivates a patient; it is well, however, to bear them in mind, and increase the caution which it behooves us to exercise in all operations where human life is at stake.—*Dublin Quarterly Journal of Medical Science.*

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY FRANCIS MINOT, M.D., SECRETARY.

JAN. 23d.—*Apoplexy.*—Dr. SHATTUCK showed the specimen. The patient, a man 45 years old, a seaman, was brought into the Massachusetts General Hospital, January 4th, hemiplegic (on the right side) and semi-conscious, having fallen in a fit after a debauch. The pulse was 56, respiration 20. He remained in the same state until Jan. 19th, when he suddenly became much distressed for breath, lost his consciousness entirely, and died in a few minutes.

The surface of the arachnoid was dry, and the convolutions were flattened, over the left hemisphere, which also projected beyond the median line. In the left hemisphere, just outside the corpus striatum and optic thalamus, was a cavity, upwards of an inch in diameter, filled with blood and coagulum of a dark-brown color. The walls were ragged, and the cerebral substance for a number of lines around was dark brown, or where it joined the healthy tissue quite yellow, which color in places extended nearly to the surface. The corpus striatum and optic thalamus were partially destroyed, but no blood had entered the ventricles. The large arteries at the base of the brain were stiff, but showed no other sign of disease. The brain elsewhere appeared normal. The heart was rather soft. Under the microscope the fibres were seen to be slightly fatty. The other organs were healthy.

FEB. 13th.—*False Membrane from the Pleura, containing a large Cavity.*—Dr. SHATTUCK showed a dense, yellowish-white, fibrous mass, within which was a large cavity, filled with clear serum, which was removed from the right pleural cavity of a woman who died shortly after entering the hospital. It was attached to the posterior wall of the right chest, extending from the apex nearly to the base, and from the spine to a point four inches beyond it, at its widest part. The walls of the cavity were from two lines to half an inch in thickness, very dense externally, and within soft, friable, irregular and easily broken. The pleural surfaces on both sides were universally adherent. The right lung was quite small, and so much compressed that most of it sank in water. The left lung was small, but not otherwise diseased. The heart and the kidneys were somewhat fatty. One ovary was converted into a sac three inches in diameter.

The patient was brought to the hospital in the evening, and presented no appearance of serious illness; but about midnight she called the watcher, saying that she was dying. The bronchia seemed gilled with secretion, she labored for breath, and died in two or three hours.

FEB. 13th.—*Pericarditis ; sudden Death from valvular Obstruction.*—Dr. SHATTUCK showed a heart from a patient who died suddenly, apparently from obstruction in the tricuspid valve. The pericardium was adherent by means of recent lymph. Between the right auricle and ventricle, passing through the tricuspid valve, was a long, firm clot, which presented a decidedly old appearance. The colon, throughout its whole extent, was enormously distended with gas.

The patient was a girl, 17 years old ; parents healthy ; healthy herself, and well developed. Came to this country in 1864, and two weeks after arrival had rheumatic fever for five weeks. Has been perfectly well since till ten weeks ago, when she had rheumatic pains in legs and arms. Was exposed to cold, Jan. 24th ; being unable to work, and suffering much on the 25th, came into hospital on the 26th.

Jan. 27th.—Pains in joints and muscles of extremities, confining her in bed, and keeping her awake in the night. Pulse 92, thermometer 102. No thoracic symptoms.

29th.—First sound of heart replaced by a slow murmur. Increased cardiac dulness. Pulse 116, small and regular. Thermometer in axilla, 103°.

30th.—Murmur loudest at right apex. Both sounds can be heard at base. Orthopnoea. Thermometer at evening, 105° ; pulse 120.

Feb. 4th.—The murmur has nearly disappeared. Was comfortable, free from pain, and breathing easily, till night of Feb. 6th, when she had paroxysms of dyspnoea, in one of which she died, early on the morning of the 7th.

FEB. 13th.—*A large mass of coarse Thread ejected from the Stomach.*—Dr. JACKSON showed the specimen, and reported the history of the case, the main facts of which he had received with it from Dr. James W. Robbins, of Uxbridge.

"The patient was a young factory girl, and was in the habit of biting off and swallowing pieces of thread. Being dyspeptic, her mother gave her an emetic, and she vomited a little of the thread, which was thrown away. Afterwards some of it came up in her throat and was again swallowed. Dr. R. was then called and gave an emetic ; and, when the mass came up in the throat, he caught it, had her head held back, and easily withdrew the whole, although such was the size of the mass that the centre of it must have actually distended the oesophagus. The weight, at first, was 4 oz. (avoir.), but it diminished, on being dried, to 4 drachms 26 grains. The patient was soon relieved of her dyspeptic symptoms, and is now a healthy married woman, the case having occurred many years ago."

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, MARCH 30, 1865.

THE PURIFICATION OF THE PRESS.—The London medical journals have entered upon an earnest crusade against the growing indecency of the public press in admitting to their columns the obscene advertisements of quacks, which promises the most satisfactory results. Already

many of the leading papers throughout the kingdom have signified their intention to exclude such matter from their columns in future, and public opinion seems at last thoroughly aroused to the enormity of this offence against decency and morality. The immediate occasion of this healthy movement was the late exposure in the courts, by a victim of these extortionate quacks, who possessed a rare moral courage, of their nefarious system of robbing. Its success is all the more gratifying, as it suggests the possibility of similar reformation this side of the Atlantic. How much it is needed here need scarcely be told. We have but to look at the entire surface of some of our journals to find how largely they are devoted to the dissemination, not only of the grossest indecencies, but of future misery to a multitude of readers. Such papers are put into the hands of boys and girls of all ages, and find their way to the table of all classes of society, corrupting the purity of the young, arousing the fears of the weak, and encouraging vice by offers of immunity and relief. So outrageous has this system become, that no longer satisfied with the publicity of the largest type in our daily press, the venders of quack medicines and secret remedies paint their obscene notices in the most exposed places by every roadside. It is indeed time that our legislature should turn its attention to this subject.

No one outside our profession, and we only to a small extent, can estimate the amount of bodily harm and loss of money inflicted upon the unwary and ignorant, who, induced by such advertisements, place themselves once within the power of these quacks. A large sum of money is at once demanded before the promised cure is undertaken, and the fears of the victim are so worked upon, during a treatment purposely designed to aggravate the disease, that he is obliged to pay additional sums until his means are exhausted. We were recently informed by a gentleman, whose official position led to the discovery, that two of the best houses in a certain fashionable street in this city were owned and occupied, under false names, by two of the most notorious of these advertising scoundrels.

There is another class of advertisements, less indecent, but quite as objectionable on the grounds of inhumanity and injustice to the people, of whom they profess to be the guardians, that fill the columns of our journals almost without exception. These are the notices of the innumerable remedies, patent medicines and itinerants, which display their deceitful promises to the credulous eyes of the sick throughout the land. Our Sunday and religious papers are particularly devoted to the interests of these systems of robbery, and seem even less able to resist the temptation of a large fee than their more worldly daily brethren. The proprietors of such journals cannot screen themselves from the consequences of the course they pursue on the plea of an honest belief in the statements they publish, for no one is better informed than they of the short success of each new remedy or quack they introduce to the public, nor would they dare rely upon them for personal relief in sickness. The amount of evil they thus foster, and for which they are directly responsible, may be in part estimated by the magnitude of the sums received for advertising, which amount to millions in a single year. This, of course, represents only the pecuniary loss, which falls chiefly upon the poor and middle classes of society; the amount of physical suffering and disease thus occasioned cannot be estimated.

We hope that some of our leading journals will take this matter up, and not only proclaim their own intention of excluding all advertisements of this class in future, but, as in England, insist upon a uniform standard in this respect, upon which the respectability of all others shall be judged. Such a reform in their own conduct will give them the moral weight of self-purity in their judgment of the affairs of others, and gain the commendation and respect of all their readers.

HARE-LIP PINS. *Messrs. Editors.*—Having had occasion to operate twice within two years on cases of hare-lip where I thought it advisable to use pins, I got our jeweller to make me two gold pins of about half the size of the common hare-lip socket pin, and one and a half inches in length, and to turn a small eye for a head, to enable me to hold them conveniently. After passing them through the sides of the divided lip, I clipped off the head and point, with a pair of bone forceps, and found them to work so well that I would recommend them to any one who may have occasion to use pins in an operation of the kind.

S. B. S., M.D.

Exeter, N. H., February 27th, 1865.

In justice to Messrs. Nichols & Co., as we find our language has conveyed an erroneous impression, we would state that their addition to Liebig's soup, spoken of in preceding numbers, consists of ten grains of proteine, from animal albumen, to each two ounces of the preparation. Although a harmless addition, we cannot consider it any improvement upon the original formula, and are happy to hear that they have also prepared the materials in accordance with the directions of Prof. Liebig.

A HORSE-FLESH BANQUET.—The grand "hippophagic banquet" has just been celebrated with great *éclat* at the Grand Hotel, Paris, under the patronage of the French Humane and Acclimatization Society. M. Quatrefages occupied the chair, and there were 180 guests present, a good 30 of these being members of the medical profession. In the face of the continued increase of the price of butchers' meat at Paris, these efforts of philanthropists to bring another variety of animal food within the scope of the poor man's purse are highly laudable. Of course, at this celebrated hotel all the resources of the culinary art could be drawn upon, and if palatable food could not be there produced from the material in question, it would be a hopeless task to seek to procure a general acceptance of horse-flesh as an article of diet by those whose means of preparing it are so limited. A chief point to be ascertained was the kind of soup it is capable of producing, this being an indispensable, and, indeed, the main article in the dietary of the French lower classes. This was pronounced to be good; but M. Latour, who has, by perseverance, advanced himself to the position of a critical, and almost an epicurean, hippophagist, declares that he has tasted much better soup when this has been prepared for a smaller number of persons, and especially at snug little horse-flesh parties which he is in the habit of entertaining at his own house. The late M. Renault, indeed, at the celebrated Alfort dinner,

made his guests the vehicle of exact experimentizing, having soups prepared from horse and ox, in a manner precisely similar, placed before them in such a manner that they were not aware of what they had partaken until they had delivered their verdict. The horse won by a whole neck! At this banquet, where the cook had more scope, he evinced his power by producing boiled horse and cabbage and horse *à la mode*, which were pronounced perfect, and absolutely undistinguishable from beef similarly treated. But it seems that the more elaborate dishes, as the *hachis de cheval à la ménagère*, the *filet de cheval roti*, and the *paté de foie de cheval*, did not give the same amount of satisfaction as the simpler viands, possibly because the appetites of these hardy investigators had become by this time rather blunted. This is of little consequence, as these are not likely to be sought for by the poor, who, notwithstanding the eulogiums passed on the new food, will constitute the only hippophagists after the fashion has passed away. The banquet, upon the whole, was pronounced a splendid success, and the préfet of police has authorized the sale of horse-flesh, subject to the sanitary regulations which prevail in France with regard to the vending of flesh-food, and of which we stand so much in need in this country.—*London Med. Times and Gazette*.

A CHINESE BEAUTY'S FOOT.—Curiosity impelled me once to be one of a party in examining an uncovered foot. The young woman was not at first very ready to remove the shoe and the collection of bands around the limb, to satisfy the strange request we made, but a few dollars quickly dissipated her reticence, and also induced another to increase the exhibition. It was no treat. The removal of the bandages was like the exhumation of a half-decomposed body, and made our party close their mouths and hold their nostrils, much to the augmented astonishment of the young ladies, while we stretched our necks to see all as quickly as possible.

No toe was visible but the big toe; the others had been doubled under the sole, with which, after weeks of suffering and excruciating pain, they had become incorporated, and were not to be distinguished from it, except by the number of white seams and scars that deeply furrowed the skin. The instep was sadly marked by the vestiges of large ulcers that had covered its surface, consequent on the violence used to bend it up into a lump; and, in form, as well as color, was like a dumpling; while the limb from the foot to the knee was withered and flaccid as that of one long paralyzed. The display was repugnant in every way—we fled, and have been careful ever since to be absent when any more of these living mummies were about to be unrolled.—*Travels in Mantchu Tartary*.

FOREIGN MEDICAL INTELLIGENCE.—Dr. JONAS QUAIN, author of *Quain's Anatomy*, died on the 31st of January in London, at the age of 70.

There are 18,000 practitioners of medicine in France at the present time.

We are sorry to announce the recent death of the eminent English geologist, Dr. Hugh Falconer. He has been engaged for the last few years in investigating the bone-deposits in caves.

The amount of absinthe drunk in Paris may be estimated in part by

the fact that Switzerland alone sent 7,500,000 gallons thither last year.

The grand prize of 5,000 francs has been adjudged by the Académie des Sciences of Paris to M. Roussel for his History of Pelagra; and among others one of 2,500 francs to M. Zenker for his investigations on Trichiniasis. The grand prize in surgery for 1866, of 20,000 francs, has for its subject "The Preservation of the Limbs by the Preservation of the Periosteum."

Dr. Livingstone is planning a new journey across the African continent.

A CHINESE DOCTOR.—There are quite a number of Chinese physicians in California, who practise among their own people. But we have come across one whose business is with the white-skinned races, and who has a large practice in his way. "Doctor" Li Fung (or some such name) has his office crowded daily with intelligent (?) Anglo-Saxons. We are informed by an educated Chinaman that Li Fung had no medical training at home, but came to California as a common laborer. Taking his cue from the advertising charlatans who infest our community, he proclaimed himself a physician of great skill and experience, and immediately drew a crowd of halt, lame and blind imbeciles, eager to have their wrists clutched by a semi-barbarian, and to test the virtues of grasshopper tea and dried maggots. We have actually conversed with one of his victims—patients, we mean—who assures us that Li Fung can tell, on feeling the pulse and without asking a question, everything that ails his patients. When the Chinese want medical aid, they go to a man whom they know to have been educated in his calling. John will not trust Li Fung, but laughs in his capacious sleeve to see the superior race jostling each other in pursuit of a Chinese mountebank.—*San Francisco Med. Press.*

We learn from the *Pacific Medical and Surgical Journal* of San Francisco, that a charter has been obtained for the Toland Medical College of that city, conferring upon it all the privileges and powers of a regular University of learning. A college edifice has been erected at the sole expense, as we understand, of Dr. Toland, which, now that the charter is obtained, has been conveyed by him to the trustees of the college. The first course of lectures commenced the present season.

The annual commencement exercises of the Cincinnati College of Medicine and Surgery were held on the 3d ult., when the degree of M.D. was conferred on twenty-three candidates. The valedictory address was delivered by Prof. Daniel Vaughan.

The Report of the Cincinnati Branch of the U. S. Sanitary Commission for three years ending Dec. 1, 1864, shows that the money expended during that time, in the purchase of sanitary supplies, the support of hospitals, and other aid to sick and wounded soldiers, amounted to \$223,675 28. The various donation supplies distributed during the same time were estimated at \$866,000 00—making a total of \$1,079,675 38. There remained in the treasury on the last day of December, 1864, \$86,246 20, invested in U. S. securities.

During the last year the number of cases treated at the Massachusetts Eye and Ear Infirmary was, males 1786, females 1753. The expenses have been \$4,544 12 for increased accommodations, and the total expenses \$12,042, and the amount received from all sources \$7,230 88. To meet the increased expenses of the Institution an appropriation of \$5,000 is needed.

The Iowa State Dental Society met at Des Moines, the capital, on the 4th of January. Officers for the year were elected, essays were read, and the following resolution was unanimously adopted:—
“Resolved, That the time has arrived when no person should enter the dental profession without having first *graduated* at a dental college; and we pledge the profession and each other that we will admit no one to a dental pupilage under us without a guarantee that he will avail himself of the high and necessary privileges of these noble institutions.”

The United States Laboratory, located at Astoria, L. I., was recently destroyed by fire. The fire commenced about 9, A.M., in the ceiling over the drying room, and the flames spread so rapidly that little opportunity was given to check them. The dwelling apartments of Assistant Surgeon J. H. Bill, U.S.A., in charge, were also destroyed. The loss by the fire to the Government, it is stated, was about \$50,000.

From the Fifteenth Annual Report of the Association for the Relief of Aged Indigent Females, Boston, we learn that the number of inmates Jan. 1, 1864, was 70; died during the year, 7; removed, 1. Entered during the year, 26. Number now in the house, 88.

The Mason General Hospital, Pemberton Square, Boston, has been abandoned, and the patients removed to the United States Hospitals in the vicinity.

In the Knight Military Hospital, New Haven, Ct., there are 563 patients, of whom 300 are sick, and 263 wounded. The hospital bakery now turns out about 2000 loaves of bread daily, which are used in the hospital and at the Conscript Camp.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, MARCH 25th, 1865.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	63	47	110
Ave. mortality of corresponding weeks for ten years, 1853—1863,	43.7	35.5	79.2
Average corrected to increased population	60	60	86.64
Death of persons above 90	0	1	1

DIED,—At Duxbury, Mass., March 23d, Dr. John Porter, aged 72.—In Acton, Mass., 22d inst., very suddenly, Dr. John M. Miles.—At South Danvers, 14th inst., of paralysis, Dr. E. F. Kittredge.

DEATHS IN BOSTON for the week ending Saturday noon, March 25th, 110. Males, 63—Females, 47. Abscess, 2—accident, 1—apoplexy, 2—inflammation of the bowels, 1—inflammation of the brain, 2—bronchitis, 4—burns, 3—cancer, 1—chickenpox, 1—cholera infantum, 1—cholera morbus, 1—consumption, 20—convulsions, 4—croup, 1—diarrhea, 4—diphtheria, 1—dropsy, 2—dropsy of the brain, 3—drowned, 1—dysentery, 1—erysipelas, 2—scarlet fever, 1—spotted fever, 1—typhoid fever, 2—disease of the heart, 4—disease of the hip, 1—infantile disease, 4—inflammation of the lungs, 5—marasmus, 2—metritis, 1—old age, 5—paralysis, 3—peritonitis, 2—puerperal disease, 1—smallpox, 8—sore throat, 1—melic, 1—tubercles mesenterica, 1—unknown, 8—whooping cough, 1.

Under 5 years of age, 43—between 5 and 20 years, 7—between 20 and 40 years, 29—between 40 and 60 years, 18—above 60 years, 13. Born in the United States, 88—Ireland, 16—other places, 6.